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DOCUMENT-IDENTIFIER: DE 3809233 A1

TITLE: Method and device for  
testing the response pressure of a  
safety valve on site

PUBN-DATE: October 6, 1988

INVENTOR-INFORMATION:

NAME

COUNTRY

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HU

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APPL-NO: DE03809233

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INT-CL (IPC): G01M003/26, G01M019/00 ,  
F16L055/00

EUR-CL (EPC): F16K037/00

US-CL-CURRENT: 138/30, 138/103

ABSTRACT:

CHG DATE=19990617 STATUS=O> For the testing of the response pressure of a safety valve on site, a force acting in its opening direction is continuously increased up to the response of the safety valve, which is acoustically perceptible by means of medium flowing out, so that a pressure can be determined at this instant with reference to the valve sealing area and directly indicated as response pressure, taking into account the pressure measured separately upstream of the safety valve. The device used for this purpose has a connection disc on the valve side and a support disc, which are connected to a frame by means of connecting rods, a coupling apparatus which can be brought into engagement with the safety valve and is connected to a lifting apparatus held on the frame side and

acting in the opening direction of the safety valve, to which lifting apparatus a force measuring cell is assigned, and an apparatus to measure the pressure upstream of the valve. The lifting apparatus has an intermediate piece (4) on the support disc (2) with a thrust bearing (7) for a hand-actuable screw spindle (6) which is in threaded engagement with a lifting sleeve (6) guided axially displaceably in the intermediate piece (4), the lifting sleeve being connected, for its part, to a mounting (11, 12, 13) for the force measuring cell (14) carrying the coupling apparatus (16, 17, 18). An indicating apparatus (21) is coupled to the force measuring cell (14) and the apparatus (20) to measure the pressure upstream of the safety valve. <IMAGE>

DERWENT-ACC-NO: 1988-286884

DERWENT-WEEK: 198841

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TITLE: Testing safety valve  
response pressure in situ - applying  
continuously  
increasing force and measuring pressure when  
flow detected

INVENTOR: BENE, F; BOZOKI, G ; LEDERER, P ;  
ORTUTAY, M

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PRIORITY-DATA: 1987HU-0001216 (March 19,  
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PATENT-FAMILY:

| PUB-NO       | LANGUAGE | PUB-DATE        | PAGES | MAIN-IPC |
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| DE 3809233 A |          | October 6, 1988 |       |          |
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APPLICATION-DATA:

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INT-CL (IPC): F16L055/00, G01M003/26 ,  
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ABSTRACTED-PUB-NO: DE 3809233A

BASIC-ABSTRACT:

A force applied to the valve in its opening direction is continuously increased until an audible response caused by the medium flowing out is detected. A pressure is measured wrt. the valve seating face at this time and is directly displayed as the response pressure account of the pressure measured before the valve.

A lifting device has an intermediate part (4) on a support plate (2) with a pressure bearing (7) for a hand operated screw spindle (6). The spindle thread engages a lifting cover axially guided in the intermediate part and connected to a force measurement cell (14) mounting (11-13). An indicator (21) is connected to the force measurement cell and to the sensor (20) measuring the pressure before the valve.

USE/ADVANTAGE - E.g. for valve in gas or oil production plant. Direct measurement of response pressure with mechanical measurement system which can be quickly installed under adverse

conditions.

CHOSEN-DRAWING: Dwg.1/1

DERWENT-CLASS: Q67 S02

EPI-CODES: S02-F01C; S02-F04A9; S02-J05;  
S02-J06B;